

## Synthesis and nonchair conformations of 2,2-disubstituted 4,4-dimethyl-1, 3-dioxanes

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### Abstract

The fundamental possibility of the synthesis of 2-substituted 1,3-dioxanes by reaction of 1,3-dioxanium perchlorates with organometallic compounds is demonstrated. A method for the synthesis of acyl derivatives of heterocycles was developed on the basis of these compounds. The existence of 2,2,4,4-substituted 1,3-dioxanes in the twist conformation was shown by  $^1\text{H}$  NMR spectroscopy; the twist conformation is explained by the effect of nonbonded 1,3-syn-axial interactions. © 1979 Plenum Publishing Corporation.

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